

These three red-flowered species have individual specializations: the inflorescence of *P. corymbosus* seems certainly to be derived from the paniculate type; the pendant inflorescence of *P. cordifolius*, with the correlated twisting of the flowers to arrange themselves normally, is peculiar to this species as is the definite scandent habit. *P. ternatus* has some tendency to be scandent too and has specialized ternate branching and leaves; its corolla, too, is the most narrow found in this section.

The connections between the red-flowered species and the others seem to occur between *P. antirrhinoides* and *P. cordifolius*, which hybridize, which have a rather similar robust habit, and which occur in the same region; also, between *P. breviflorus* and *P. ternatus*, which mimic each other's habit but are probably not in a direct line of descent; and between *P. Lemmonii* and *P. corymbosus*, whose habitual similarities are probably due more to their common occurrence in the moister northern mountains than to a close phylogenetic relationship.

Carnegie Institution of Washington,  
Stanford University, October 4, 1935.

## NEW AND NOTEWORTHY NORTHWESTERN PLANTS—VI<sup>1</sup>

HAROLD ST. JOHN

### JUNCACEAE

*LUZULA CAMPESTRIS* (L.) DC. var. *columbiana* St. John var. nov. Planta viridis cristata, caulibus paucis vel pluribus 16–48 cm. altis; foliis 2–4 mm. latis quam caules valide brevioribus, foliis caulinis 2–3 similaribus villosis-ciliatis ad basin; bracteis inferioribus quam inflorescentias brevioribus vel superantibus; capitulis 1–5 ovatis vel cylindraceutis 10–30-floriferis 6–11 mm. longis, capitulis terminalibus breve pedunculatis, capitulis lateralibus cum pedunculis 1.5–6.5 cm. longis; bracteis florum pallidis hyalinis ovato-lanceolatis acuminatis laceratis; sepalis 2–2.5 mm. longis plerumque atro-brunneis lanceolatis acuminatis ad marginem hyalinis; petalis latioribus; fructibus ovali-trigonis atro-brunneis vel atrescentibus ad apicem 2–2.5 mm. longis.

Plants bright green, tufted; stems few to several, 16–48 cm. tall; basal leaves much shorter than the stems, 2–4 mm. broad; cauline leaves 2–3, similar, villous ciliate at base; lowest bract shorter than or exceeding the inflorescence; heads 1–5, ovate to short cylindric, 10–30-flowered, 6–11 mm. long, the terminal one short stalked, the lateral ones on slender rays 1.5–6.5 cm. long; floral bracts pale, hyaline, ovate-lanceolate, acuminate, lacerate;

<sup>1</sup> Contribution No. 50 from the Department of Botany, State College of Washington.

perianth 2–2.5 mm. long, dark brown or largely so; sepals lanceolate, acuminate, hyaline margined; petals broader towards the tip; capsules oval-trigonous, dark brown to blackish at tip, equaling the perianth.

WASHINGTON: good soil, shady places, 5300 feet, Wenatchee Mts., Kittitas Co., July 1, 1903, *J. S. Cotton 1277*; in meadows, Falcon Valley, May 28, June, 1892, *W. N. Suksdorf 2118*.

OREGON: open woods, 4500 feet, Government Camp, Mt. Hood, Hood River Co., July 3, 1926, *Carl English, Jr., 83* (type, in Herb. State College of Washington); bogs, 4500 feet, Government Camp, Mt. Hood, July 4, 1926, *Carl English, Jr., 159*; near water, Mirror Lake, 4500 feet, Mt. Hood, Clackamas Co., Aug. 3, 1927, *C. English, Jr., 722, 873*.

The varietal name is taken from that of the Columbia River, which, with its tributaries, receives the drainage from all of the mountainous areas here listed.

The closest relative of this new variety is doubtless *Luzula campestris* (L.) DC. var. *alpina* Gaud.—var. *sudetica* (Willd.) Celak.—of Hudson Bay and of the mountains of Eurasia. It has the heads ovate, scarcely 5 mm. long, mostly 5–8-flowered, often all sessile or 1–2 lateral heads short stipitate. On the contrary, *L. campestris* (L.) DC. var. *columbiana* St. John has the heads ovate to short cylindrical, 6–11 mm. long, 10–30-flowered, and the lateral heads on rays 1.5–6.5 cm. long.

In a recent discussion of this species and its varieties,<sup>2</sup> Theo. Holm indicates certain differences between *L. campestris* and its variety *multiflora* and concludes that the latter should be maintained as a species and that the American varieties should be referred to the latter species. He does not present a revision of the group or make the nomenclatorial transfers, but merely leaves it as a suggestion. The writer is familiar with several of the varieties and is ready to accept them as variations of one wide-spread, polymorphic species. This was essentially the view of Buchenau<sup>3</sup> and of Fernald and Wiegand.<sup>4</sup> The botanists of Western North America have mostly neglected or rejected these treatments. The writer calls attention to their clear presentation of taxonomic entities based on adequate characters and with natural geographic ranges.

For instance, in the state of Washington, four varieties of *L. campestris* are now known to occur. They may be separated by the following key:

<sup>2</sup> Holm, Theo. The bulbiferous form of *Luzula multiflora*. *Rhodora* 28: 133–138. 1926.

<sup>3</sup> Buchenau, Fr. Juncaceae, in Engler, A., *Pflanzenreich* IV. 36: [*Luzula campestris*] 83–95. 1906.

<sup>4</sup> Fernald, M. L. and Wiegand, K. M. The Variations of *Luzula campestris* in North America. *Rhodora* 15: 38–43. 1913.

KEY TO VARIETIES OF *LUZULA CAMPESTRIS* (L.) DC.

Perianth 2-2.5 mm. long .....	<i>L. campestris</i> var. <i>columbiana</i>
Perianth longer (2.5-4.5 mm.).	
Inflorescence congested, with no obvious rays .....	<i>L. campestris</i> var. <i>congesta</i>
Inflorescence looser, the lateral spikes on obvious rays.	
Heads mostly cylindric, the larger 10-30 mm. long; perianth usually pale, 3-4.5 mm. long .....	<i>L. campestris</i> var. <i>comosa</i>
Heads globose or short cylindric, 4-11 mm. long; perianth dark brown to blackish, 2.5-3 mm. long ..	<i>L. campestris</i> var. <i>frigida</i>

Since stations in Washington for the three latter varieties have not been listed, it is worth while to give them here.

*L. CAMPESTRIS* var. *COMOSA* (Meyer) Fern. et Wieg. *Rhodora* 15: 41. 1913. At middle and low elevations, common and widely distributed in the state. Only two collections need be cited. Whidby Island, *Gardner 301*; Kamiack Butte, *Elmer 805*.

*L. CAMPESTRIS* var. *CONGESTA* (Thuill.) Meyer, *Synop. Luz.* 18. 1823. Near Skagit Pass, Cascade Mts., *Lake & Hull 415*.

*L. CAMPESTRIS* var. *FRIGIDA* Buch. *Oesterr. Bot. Zeitschr.* 48: 284. 1898. Stuart Island, *Lawrence 98*; Columbia River, western Klickitat Co., *Suksdorf 2100*.

## ERICACEAE

*PYROLA UNIFLORA* L. var. *reticulata* (Nutt.) St. John comb. nov. *Moneses reticulata* Nutt. *Trans. Am. Phil. Soc.* II, 8: 271. 1843. *M. uniflora* (L.) Gray var. *reticulata* (Nutt.) Blake, *Rhodora* 17: 28. 1915.

The characters used to separate *Moneses* as a genus from *Pyrola* have been reviewed. The one-flowered habit and the spreading position of the petals seem to the writer valueless. The capsule dehisces from the tip down, and the edges of the valves are cobwebby. These are characters of some value, but to the writer they do not appear to be of generic value, nor did they to Drude in Engler and Prantl.

University of Hawaii,  
Honolulu, June, 1935.

## REVIEW

*An Illustrated Manual of Pacific Coast Trees.* By HOWARD E. McMINN and EVELYN MAINO. Pp. xii + 409, with 415 figures. Published by University of California Press, 1935. \$3.50.

One of the important gaps in the development of botany in North America is the lack of popular works accurate and com-